

**Abstract**

The present invention relates to a novel multi functional additive grafted rubber. More particularly the present invention relates to novel grades of rubber and in particular to chemically grafted with cardanol (meta –penta decenyl phenol) and/or its derivatives.

- 5 Importantly the rubber grades of the invention involve chemically anchored /grafted selective meta alkenyl phenol and/or its derivatives in the backbone of natural or synthetic rubber. Importantly, such rubber variant of the invention have high plasticity, lower Mooney and melt viscosities, better cure properties as compared to conventional virgin natural rubber or natural rubber plasticised with aromatic process oils.